

Application No.: 09/763484

Docket No.: HHI-026US

**REMARKS**

Upon entry of this Amendment, claims 1, 2, 4 and 5 are pending. Claim 3 has been incorporated into claim 1. Claim 6 was previously withdrawn from consideration. Claims 3 and 6 are cancelled by this amendment without prejudice or disclaimer. Reconsideration and allowance of all pending claims are hereby requested in view of the remarks below.

Entry of this amendment is asserted to be proper and is hereby requested, as no new issues are raised by incorporating the subject matter of dependent claim 3 into claim 1.

***Claim Rejections – 35 U.S.C. §102***

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Crowley et al. (US 5,472,153). Applicant traverses this rejection. However, in an effort to expedite prosecution of this case, the subject matter of dependent claim 3 has been incorporated into claim 1. Applicant submits claim 1 is patentable as addressed below. Claim 2 is patentable at least by way of its dependency from claim 1.

***Claim Rejections – 35 U.S.C §103***

Claims 3-5 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Crowley et al. (US 5,472,153) in view of Nelson (US 5,904,095). Applicant traverses this rejection.

Application No.: 09/763484

Docket No.: HHI-026US

Crowley provides a roll support and feed apparatus, used for supporting a roll of paper. Crowley notes that "[o]ne of the significant drawbacks associated with prior art roll feeding machines relates to the manner in which the roll is supported in the machine. The prior art machines employ a roll core shaft. These shafts represent an extra component that must be assembled in order to handle the roll. The core shafts are very heavy and are easily damaged if dropped. They are also expensive to replace or repair." See column 1, lines 38-43. Therefore, an object of Crowley is "to provide an improved means for roll support, one that in particular, does not require the use of core shafts...." See column 2, lines 8-12.

The Office Action cites the embodiment of Crowley illustrated in Figures 17 and 18, which is for use with a roll of paper having a soft core. As discussed in Crowley at column 13, lines 47-61, and shown in Figures 17 and 18, "spikes 182 are forced into the roll core 13 open end." Crowley continues, providing that "each of the spikes embeds itself into the roll core surface. Of course, a relatively soft roll core must be utilized to enable such embedding."

In summary, Crowley teaches away from the use of a core shaft and uses spikes embedded into an end of a soft core of a roll of paper to mount the roll of paper.

Nelson provides a bridge mandrel on which is mounted a thin-walled composite printing sleeve 30 for flexographic printing. The bridge mandrel slides over an existing, standard sized mandrel 28 in a flexographic printing press. See column 3, lines 12-29. The bridge mandrel is held to the first mandrel 28 by a lock collar 48. See column 4, lines 48-55. To change a printing roller 10, Nelson provides that compressed air is forced through air conduit 32 to expand the integrated

Application No.: 09/763484

Docket No.: HHI-026US

sleeve roller on the first mandrel 28 to expand to slide off the mandrel. See column 4, line 56, to column 5, line 15.

The Office Action claims that it would be obvious "to modify the holding device of Crowley et al. by providing the sleeve having air channels as taught by Nelson for quickly replacing a printing sleeve in a printing press."

The Manual of Patent Examining Procedure (MPEP) § 2142 states that:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

The MPEP § 2143 further provides that, "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification," and "[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious."

Application No.: 09/763484

Docket No.: HHI-026US

Here, Crowley embeds spikes into a soft core of a roll of paper. The Office Action claims that Crowley would be obvious for use in holding a printing sleeve in a printing press. Neither the Office Action nor the references explain how the printing sleeve would not be destroyed and made inoperable by embedded spikes of Crowley. It would appear that such embedding would at least disrupt the circumference of any printing sleeve, inhibiting printing. See column 1, lines 57-59, of Nelson noting a problem in the art of loss of concentricity of inking sleeves.

Applicant notes that Crowley states, "[o]f course, a relatively soft roll core must be utilized to enable such embedding." It is not clear what forms a soft roll core when Crowley is modified for use in holding a printing sleeve or how such a configuration would be operational or obvious. Furthermore, no explanation is offered regarding how air conduit provided in the sleeve, as taught by Nelson, would even be operational in Crowley "for quickly replacing a printing sleeve in a printing press" as asserted by the Office Action. As noted above, Crowley embeds spikes into a soft roll core. It is not clear from the Office Action or the references how air conduit would be able to remove a soft roll core from the embedded spikes. Furthermore, it is not clear how the air conduit would work, in that Crowley teaches away from the use of a roll core shaft.

Furthermore, Applicant again objects to the combination of Nelson and Crowley, by asserting that Crowley teaches away from the use of a roll core shaft. Nelson, while having nothing to do with paper roll supports, discloses the use of both a first mandrel 28 and a bridge mandrel. While Applicant continues to assert that flexographic printing sleeve supports and paper roll supports are different, Applicant notes that to the extent the Office Action continues to effectively claim they are analogous, a first mandrel 28 is then analogous to a roll core shaft. As such, Crowley

Application No.: 09/763484

Docket No.: HHI-026US

explicitly teaches away from the configuration of Nelson and would therefore not be obvious to combine with Nelson.

As noted above, even if the references were combinable, Crowley's spikes would destroy the operation of Nelson by at least deforming the sleeve of Nelson. Also, it appears that the air conduit of Nelson would not be operational without the first mandrel of Nelson, which Crowley teaches away from. Furthermore, even if the air conduit were operational, it is not clear or obvious how it would be effective in removing an embedded object, such as for example, the printing sleeve, from the spikes of Crowley.

In view of the above remarks, Applicant submits that there is no motivation to combine or expectation of success, and therefore, the rejection of the subject matter of claim 3, now in claim 1, under 35 U.S.C. §103(a) is improper and should be withdrawn. Also, Applicant submits that the references do not support the assertion that all of the limitations of claim 1 are obvious. For example, the references do not suggest a receiving member being adjustable along the longitudinal axis and a support sleeve having air channels leading from an end face or from an inner surface to an outer surface of the support sleeve. Applicant submits that claims 2, 4 and 5 are patentable at least by way of their dependency from claim 1.

### *Conclusion*

In view of the remarks set forth above, it is respectfully submitted that this application is in condition for allowance. Accordingly, allowance is requested. If there are any remaining issues or

Application No.: 09/763484

Docket No.: HHI-026US

the Examiner believes that a telephone conversation with the Applicant's attorney would be helpful in expediting prosecution of this application, the Examiner is invited to call the undersigned at (617) 227-7400.

Dated: December 8, 2003

Respectfully submitted,

By 

David J. Rikkers

Registration No.: 43,882

LAHIVE & COCKFIELD, LLP

28 State Street

Boston, Massachusetts 02109

(617) 227-7400

(617) 742-4214 (Fax)

Attorney For Applicant